

APPENDIX 2

"In the early 1940s, John T. Riddell, who later formed John T. Riddell Incorporated, invented the first plastic suspension helmet. In 1949, plastic helmets became legalized."

AMAC ¶385

FIRST CHINSTRAP WORN ON CHIN

1940: The legalization of the plastic helmet in 1949 made it possible to bake color into helmets. Thermoplastic was used for this helmet, resulting in a lighter-weight and more impact-resistant model. This helmet also represents the first use of a padded, leather chin strap – worn on the chin – for the purpose of protecting as well as holding helmet in place.

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<http://www.riddell.com/innovation/history/>

"In the 1950s, the Riddell Defendants manufactured a face-mask component for its helmets, which was eventually patented."

AMAC ¶386(a)

FIRST TUBULAR BAR GUARD

1957: The breakthrough in face masks came in 1955. G.E. Morgan, invented the BT-5 face mask for quarterback Otto Graham. The "BT" in the invention's name was for bar tubular; it was a single tubular bar that was a combination of rubber and plastic. From BT-5 came a variety of single bars, double bars, triple bars, and birdcages. Plastic and rubber tubing or welded steel or aluminum with a vinyl plastisol coating were used in their construction.

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<http://www.riddell.com/innovation/history/>

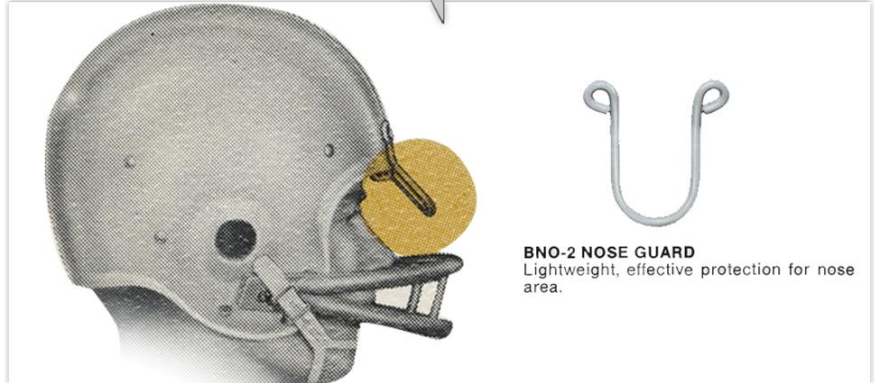
"In 1962, the Riddell Defendants used a "U" shaped nose protector with a shell (known as the TK2) molded out of polycarbonate. The Riddell Defendants also designed an open/closed cell foam and composite liner system for this model to increase the efficiency of the webbed suspension."

AMAC ¶386(b)

FIRST NOSE PROTECTOR U BAR

1962: First to use the "U" shaped nose protector, the shell of this – the TK2 – is molded out of polycarbonate. In the 60s polycarbonate was a "new and improved" type of plastic that was just starting to see its way into bulletproof glass and automobile bumpers. An open/closed cell foam and a composite liner system were also designed for this model to increase the efficiency of the webbed suspension.

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"In 1963, the Riddell Defendants developed the TAK-29 helmet, which was the first to use air inflation for fitting the helmet snug to the head. The TAK-29 shell, like the TK2, displayed the protective polycarbonate plastic, in addition to including tough shock and cut-resistant face-mask attachment straps."

AMAC ¶386(c)

FIRST AERO-CELLS® IN A HELMET

1963: This TAK-29 was the first to use air inflation for fitting the helmet snug to the head. But with just one air valve at the base of the helmet, the custom fit only accommodated the player's neck size. The TAK-29 shell, like the TK2, proudly displays the durable and protective polycarbonate plastic. And the tough shock and cut-resistant face mask attachment straps were also included.

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<http://www.riddell.com/innovation/history/>

"In 1969, recognizing that head protection was a key factor in helmet design requiring durable head protection, the Riddell Defendants constructed a micro-fit helmet model with injection molding technology to create a one-piece shell to improve the structural integrity of the entire helmet."

AMAC ¶386(d)

FIRST MICRO-FIT® HELMET

1969: The experimental nature of the 1960s influenced many changes in the design and manufacture of football helmets. With head protection a key factor in helmet design, durable head protection became a must. This model was constructed with injection molding technology used for this model created a one-piece shell that improved the structural integrity of the entire helmet.

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<http://www.riddell.com/innovation/history/>

"In 1973, the Riddell Defendants developed, designed, manufactured, sold, and/or distributed an air cushion helmet whose interior system consisted of individual vinyl air cushions with layers of fitting and energy absorbing foam. When a blow was struck, the air in the cushion was expelled through a single vent, greatly reducing the initial impact. With the exhausting of the air cushion, the compressed fitting foam was further compressed, reducing impact."

AMAC ¶386(e)

FIRST AIR CUSHION HELMET

1973: One of the most successful helmets of its time. The interior system consists of individual vinyl air cushions with layers of fitting and energy absorbing foam. When a blow is struck, the air in the cushion is expelled through a single vent, greatly reducing the initial impact. With the exhausting of the air cushion, the compressed fitting foam is further compressed, reducing impact.

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<http://www.riddell.com/innovation/history/>

"In 1977, the Riddell Defendants developed, designed, manufactured, sold, and/or distributed a stainless steel face-mask which offered greater bend resistance that prevented helmet breakage at the drill holes."

AMAC ¶386(f)

FIRST STAINLESS STEEL FACE MASK

1977: Riddell stainless steel face masks offered greater bend resistance that prevented helmet breakage at the drill holes. Once the competitors started producing the same technology, Riddell's still maintained the lightest weight in the market.

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<http://www.riddell.com/innovation/history/>

"In 1981, the Riddell Defendants developed, designed, manufactured, sold, and/or distributed an Air Cushion Engineered helmet."

AMAC ¶386(g)

FIRST AIR CUSHION® ENGINEERED HELMET

1981: The Air Cushion Engineered (A.C.E.) helmet provided protection never seen before.

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<http://www.riddell.com/innovation/history/>

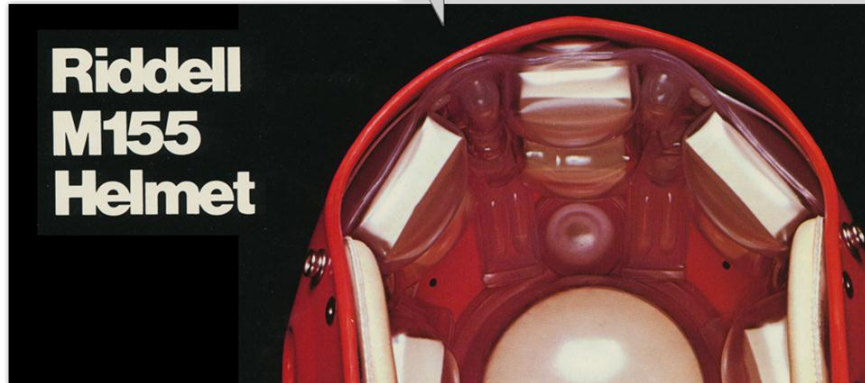
"In 1982, the Riddell Defendants developed, designed, manufactured, sold, and/or distributed a M155 helmet model with a combination of foam and liquid-filled cells used for padding. On impact, the liquid would be throttled from one cell to the next, resulting in energy attenuation. The M155 helmet model included one-piece injection-molded face-masks which were mar and rust-resistant, in addition to polyurethane face mask straps and universal jaw pads."

AMAC ¶386(h)

POLYURETHANE FRONT PAD AND UPDATED SUSPENSION

1982: This M155 model reveals the combination of foam and liquid-filled cells used for padding. On impact, the liquid would be throttled from one cell to the next, resulting in energy attenuation. At the time it was manufactured, one-piece injection molded face masks were mar and rust-resistant. Polyurethane face mask straps and Universal jaw pads resulted in a high-quality, custom-fit, highly protective helmet.

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<http://www.riddell.com/innovation/history/>

"In 2002, the Riddell Defendants developed, designed, manufactured, sold, and/or distributed the Riddell Revolution helmet designed with the intent of reducing the risk of concussion."

AMAC ¶386(i)

THE RIDDELL® REVOLUTION FOOTBALL HELMET

2002: The first helmet (Riddell Revolution) designed with the intent of reducing the risk of concussion. The Riddell Revolution was the first major innovation in football helmets in 25 years.

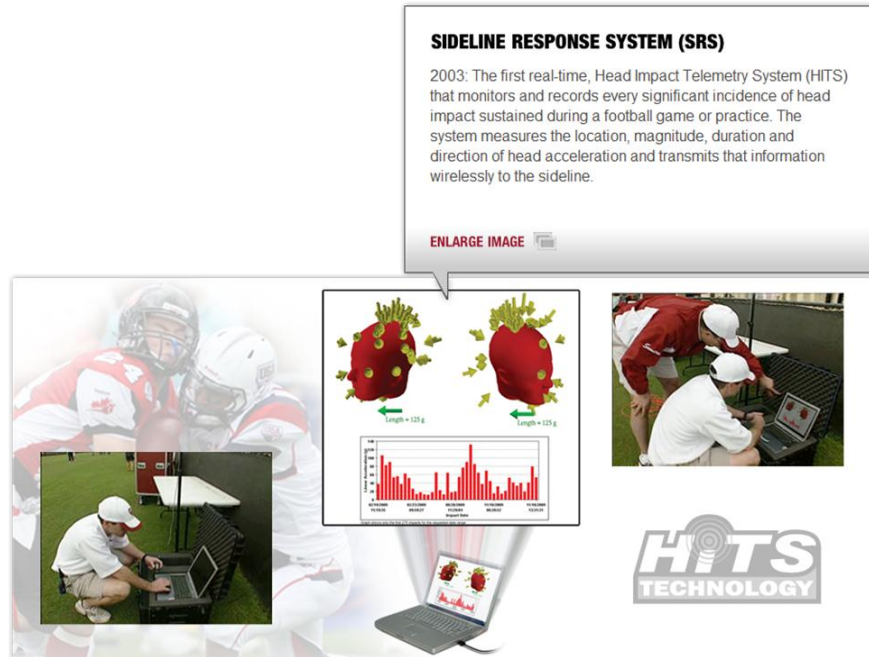
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<http://www.riddell.com/innovation/history/>

"In 2003, the Riddell Defendants developed, designed, manufactured, sold, and/or distributed a real-time, Head Impact Telemetry System (HITS) to monitor and record significant incidences of head impact sustained during a football game or practice. The system measured the location, magnitude, duration, and direction of head acceleration and transmitted that information wirelessly to the sideline."

AMAC ¶386(j)



<http://www.riddell.com/innovation/history/>

"In 2006, the Riddell Defendants provided a research grant to the University of Pittsburgh medical Center for head injury research. The study compared rates of high school athletes who wore the Riddell Revolution helmet with those who wore traditional helmets."

AMAC ¶386(k)



<http://www.riddell.com/innovation/history/>

"In 2007, the Riddell Defendants developed, designed, manufactured, sold, and/or distributed an individual helmet system, Revolution IQ Hits™, allowing players to monitor the number and severity of impacts received during games and practices. On-board electronics record every impact, allowing players to upload and evaluate each occurrence on their home computers."

AMAC ¶386(l)

THE REVOLUTION IQ HITS™

2007: The first individual helmet system that allows a player to monitor the number and severity of impacts received during games and practices. On-board electronics record every impact, allowing players to upload and evaluate each occurrence on their home computers.

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<http://www.riddell.com/innovation/history/>

"In 2001 [sic], the Riddell Defendants developed, designed, manufactured, sold, and/or distributed the 360 helmet which uses energy-managing materials and a face mask attachment system to disperse the energy of frontal impacts. According to Riddell, it developed this helmet using over 1.4 million impacts collected through Riddell's HITS technology."

AMAC ¶386(m)

RIDDELL 360 HELMET

2011: First in helmet design that uses energy managing materials and face mask attachment system that disperses the energy of frontal impacts. Informed by over 1.4 million impacts collected through Riddell HITS technology.

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<http://www.riddell.com/innovation/history/>